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PRE-APPEAL BRIEF REQUEST FOR REVIEW	Docket No.: **D/A1258**
Application No.: **10/808,679**	Filed: **March 25, 2004**
Title: **POLYMER PROCESSES**	
First Named Inventor: **Timothy J. Fuller**	
Art Unit: **1752**	Examiner: **Amanda C. Walke**

Applicant(s) request(s) review of the final rejection in the above-identified application. No amendments are being filed with this request.
This request is being filed with a notice of appeal.
The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.
☐ assignee of record of the entire interest See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
☒ attorney or agent of record.
☐ attorney or agent acting under 37 CFR 1.34.

Respectfully submitted,
FAY SHARPE LLP

Date: May 18, 2007

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NOTE: Signature(s) of all the inventor(s) or assignee(s) of record of the entire interest or their representative(s) is/are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of 1 forms are submitted.

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	Signature: Lynda S. Kalemba
Date: May 18, 2007	Name: Lynda S. Kalemba

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ATTACHMENT TO: Pre-Appeal Brief Request for Review

Dear Sirs:

Appellant respectfully requests that the Examiner's rejections of claims 1, 5-16, and 20-32 be reversed.

I. Status of the Claims

Claims 1, 5-12, 16, 20-27, and 30-32 are rejected based on Fuller (U.S. Patent No. 6,200,716) in view of Deubzer (U.S. Patent No. 6,251,313).

Claims 1, 5-14, 16, 20-22, and 28-32 are rejected based on Fuller in view of Pinschmidt, Jr. (U.S. Patent No. 6,391,992).

Claims 1, 5-12, 16, 20-22, and 30-32 are rejected based on Fuller in view of Sato (U.S. Patent No. 5,710,211).

Subsequent to the Final Office Action mailed on February 27, 2007, Applicants submitted an Amendment After Final on March 26, 2007. No claims were amended in the Amendment After Final; only remarks were submitted. By an Advisory Action dated April 6, 2007, the Examiner indicated that the remarks did not place the application in condition for allowance.

II. Remarks

These three rejections have been maintained since the first Office Action issued June 15, 2005, and through four subsequent Office Actions. Thus, the Examiner has had ample opportunity to present her arguments and to rebut Applicants' arguments. The Examiner has failed to make a *prima facie* case of obviousness.

A. The claims are not obvious over Fuller and Deubzer.

According to the Examiner, Fuller teaches that hydrolysis is performed in the presence of a basic catalyst and Deubzer teaches conventional basic catalysts for any hydrolysis reaction. It would therefore have been obvious to prepare the material of Fuller using the catalysts of Deubzer. See page 7 of the Office Action.

The Examiner has incorrectly interpreted the two references. In particular, Fuller discloses the reduction of poly(vinylbenzyl acetate) to poly(vinylbenzyl alcohol) using a borane-tetrahydrofuran (BTHF) complex. The BTHF complex is an acid catalyst and Fuller discloses only this specific reaction. See col. 6, lines 15-46. Deubzer does not teach basic catalysts for any reaction, only his reaction for preparing microcapsules having organopolysiloxane walls. The catalysts are also incorporated into the organopolysiloxane walls. See col. 4, lines 11-46.

The combination of Fuller and Deubzer does not meet all claim limitations. Fuller discloses the use of an acid catalyst, BTHF. However, the instant claims require the use of a basic catalyst.

There is no motivation to make the combination because the references teach away from their combination. In particular, Deubzer explicitly teaches that his basic catalysts cannot be used with water-miscible solvents. See col. 3, lines 55-65. The solvent recited in the instant claims, pyridine, is water-miscible. Fuller uses water, methanol, and THF as solvents: they are all water-miscible. Thus, Deubzer teaches away from the use of his basic catalysts in the reaction of Fuller.

For these reasons, the claims are not obvious over the combination of Fuller with Deubzer.

B. The claims are not obvious over Fuller and Pinschmidt, Jr.

According to the Examiner, Fuller teaches that hydrolysis is performed in the presence of a basic catalyst and Pinschmidt, Jr. teaches basic catalysts. It would therefore have been obvious to prepare the material of Fuller using the catalysts of Pinschmidt, Jr. See page 8 of the Office Action.

There is no motivation to combine Fuller and Pinschmidt, Jr. In particular, neither reference teaches or suggests the use of a basic catalyst. The teachings of Fuller are discussed above. Pinschmidt, Jr., teaches that his reaction (which is not for the production of poly(vinyl alcohol)) proceeds best within a pH range of 3 to 7, and at most 3.0 to 8.0. See col. 5, lines 50-65. The instant claims require the use of pyridine as a solvent, and pyridine is a base (pK_a= 5.2). Thus, neither reference provides motivation to use a basic catalyst.

For this reason, the claims are not obvious over the combination of Fuller with Pinschmidt, Jr.

C. The claims are not obvious over Fuller and Sato.

According to the Examiner, Fuller teaches that hydrolysis is performed in the presence of a basic catalyst and Sato teaches the use of pyridine as a solvent in a process for producing poly(vinyl alcohol). It would therefore have been obvious to prepare the material of Fuller using pyridine as a solvent. See page 8 of the Office Action.

The Examiner has incorrectly interpreted Sato. First, Sato's process does not hydrolyze poly(vinylbenzyl acetate) to poly(vinyl alcohol). Instead, Sato produces poly(vinyl alcohol) through one of two reactions. Either (1) a vinyl ester polymer (A) having an epoxy group is reacted with a compound (B) having a thiol or thioester group; or (2) a vinyl ester polymer (C) having a thiol or thioester group is reacted with a compound (D) having an epoxy group. See the abstract. Second, Sato uses pyridine as a reaction catalyst; see col. 5, lines 4-14. Sato discusses solvents elsewhere and pyridine is not named as a solvent; see col. 4, lines 52-62.

There is no motivation to combine the references. In particular, Sato teaches the use of pyridine as a catalyst between specific reactants, not as a solvent. None of the reactants are similar to poly(vinylbenzyl acetate). The Examiner has not shown where Fuller or Sato explains how a catalyst suitable for those reactants is suitable for poly(vinylbenzyl acetate). Also, a solvent and a catalyst perform different functions and the recitation of pyridine as a catalyst would not suggest its use as a solvent to one of ordinary skill in the art. The teaching of pyridine as a catalyst, in fact, teaches away from its use as a solvent in order to prevent unwanted or unexpected chemical reactions from occurring.

For these reasons, the claims are not obvious over the combination of Fuller with Sato.

D. The Examiner's responses do not overcome these arguments.

In each Office Action, the Examiner has provided the same response to the argument that Fuller does not disclose the use of a basic catalyst. The Examiner has stated that Fuller employs a catalyst known in the art to function in a hydrolysis reaction and is thus not limited only to acid catalysts. One of ordinary skill would have been motivated to add a basic catalyst as taught by the secondary references to increase the yield of the desired product.

The Examiner's general response is insufficient to overcome the specific arguments presented with respect to each rejection. Deubzer teaches away from the combination of a basic catalyst with the specific solvent recited in the claims, pyridine. Pinschmidt, Jr. teaches the use of an acidic environment, one completely unsuitable for a basic catalyst. Sato teaches the use of pyridine as a catalyst for a specific reaction; as the specific reaction is not used in Fuller, there is no reason to use pyridine. The Examiner has had three opportunities to respond to each of these arguments and has not successfully rebutted them. Therefore, the rejections should be withdrawn.

III. Conclusion

For the reasons outlined above, Appellant respectfully requests that the Examiner's rejection of the pending claims be reversed.

Respectfully submitted,

FAY SHARPE LLP

Date: May 18, 2007

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